Jacob Grunwald

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EDUCATION

University of Colorado, Boulder

Boulder, CO

Bachelor of Science in Electrical and Computer Engineering; GPA: 3.194

Aug. 2014 - May 2018

EXPERIENCE

Halleck Willard Inc.

Frederick, CO

Embedded Systems Engineering Intern

May 2017 - Aug. 2017

- Eggbot: Ported code for the Eggbot from Evil Mad Scientists to a Renesas S1 ARM cortex microprocessor. Modified code to take advantage of multithreading and an RTOS.
- PCB Design: Designed a microcontroller to mimic the hardware of the Eggbot using Altium. Designed a connector shield for a Renesas development board with Altium.
- o Module Guides: Helped to test and verify Renesas Synergy Module Guides. Ran test code and proofread module documentation.

Colorado Space Grant Consortium RocketSat11

Boulder, CO

Avionics Team Member

Sep. 2016 - May 2017

- Software: Designed and tested software to integrate several sensors and cameras into a sounding rocket payload while maximizing sampling frequency
- Hardware: Assisted in design and testing of hardware components for a sounding rocket payload. Focused particularly on testing communication protocols and integration of sensors with same communication protocols.

Electrical, Computer, and Energy Engineering Department

Boulder, CO

Course Assistant

Sep. 2015 - Dec. 2016

- o CU Arduino: Designed and built an Arduino platform for use in the departments freshman projects course.
- Student Help: Assisted students in class work for ECEN 1400, a freshman electrical engineering projects class. Work included helping students to understand electrical engineering and programming concepts.

SKILLS

• **Programming**: C, some Assembly, Verilog

CAD: Quartus Design, Altium Design

OS: Windows, Linux

Leadership

- President of the Electrical Engineering Student Society: Organized and led social, technical, and networking events for the Electrical, Computer, and Energy Engineering Department at CU Boulder
- Fundraising: Led a team of 9 students in raising \$8,000 for LIMBS International, a non-profit group dedicated to donating artificial legs to those in need, over the course of six months.
- **Teamwork:** Worked with a group of 12 others to create and run pre-teen oriented programs at South Regional Library of the Montgomery County Library System for four years.